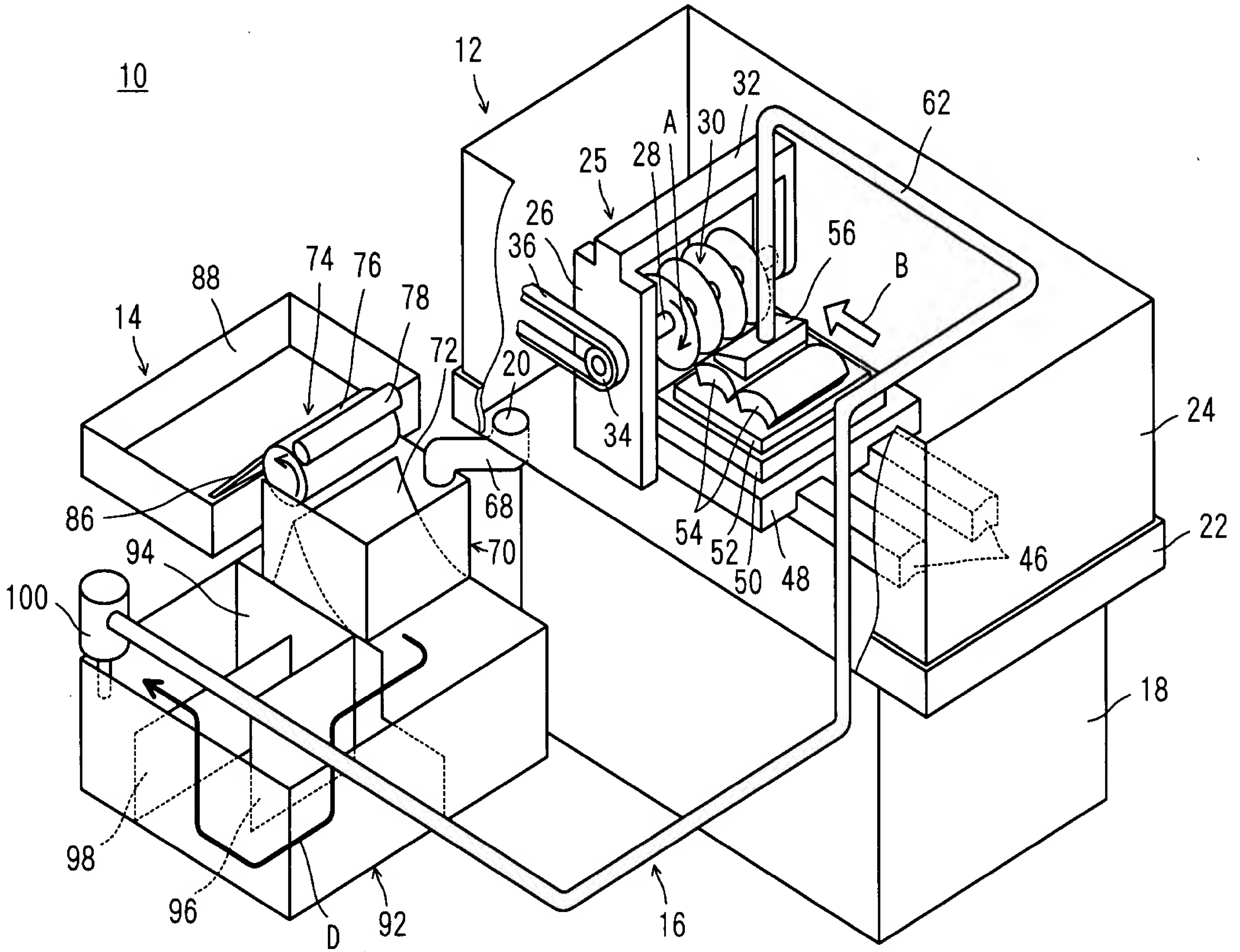
FIG. 1


10
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86
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92
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96
98
100
A
B
D

FIG. 2A

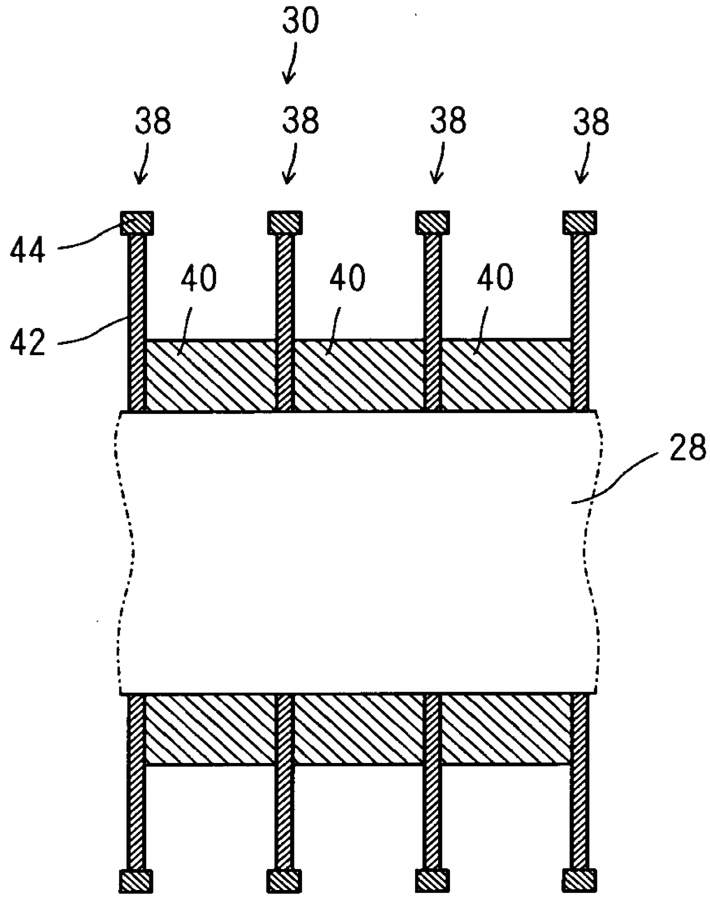

FIG. 2B

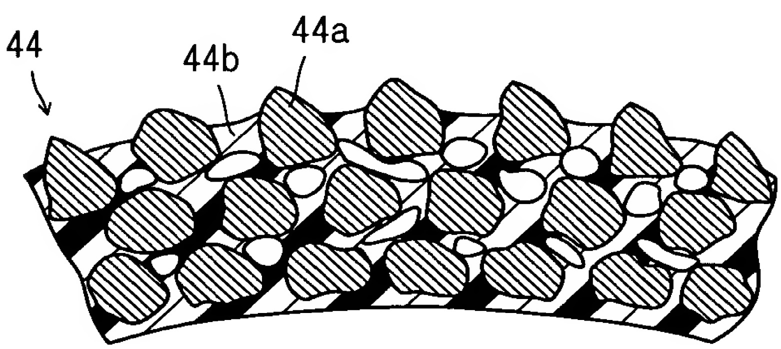

FIG. 3

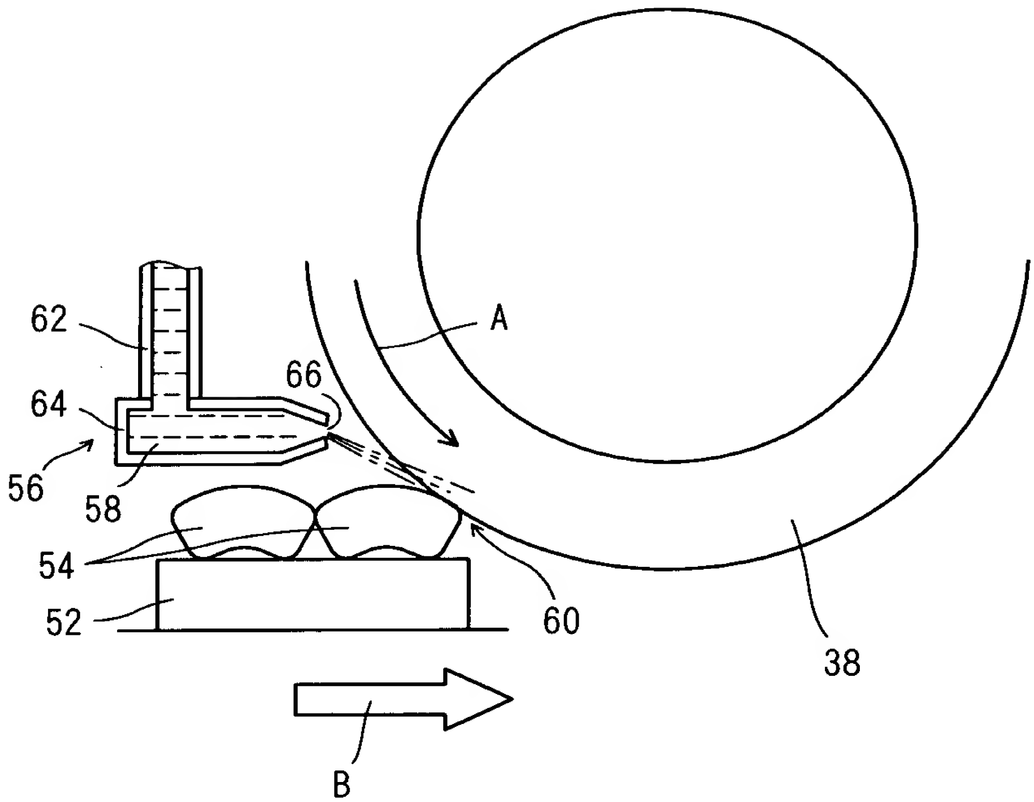

FIG. 4A

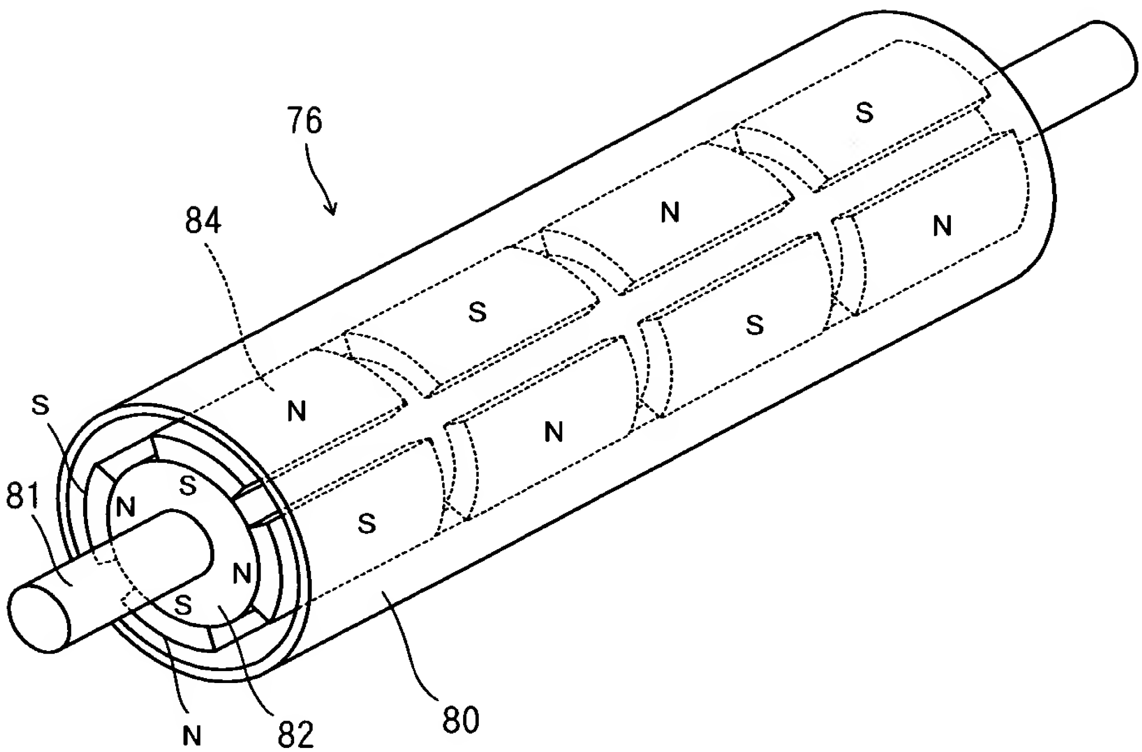

FIG. 4B

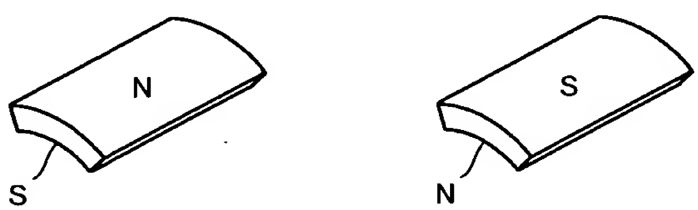

FIG. 5

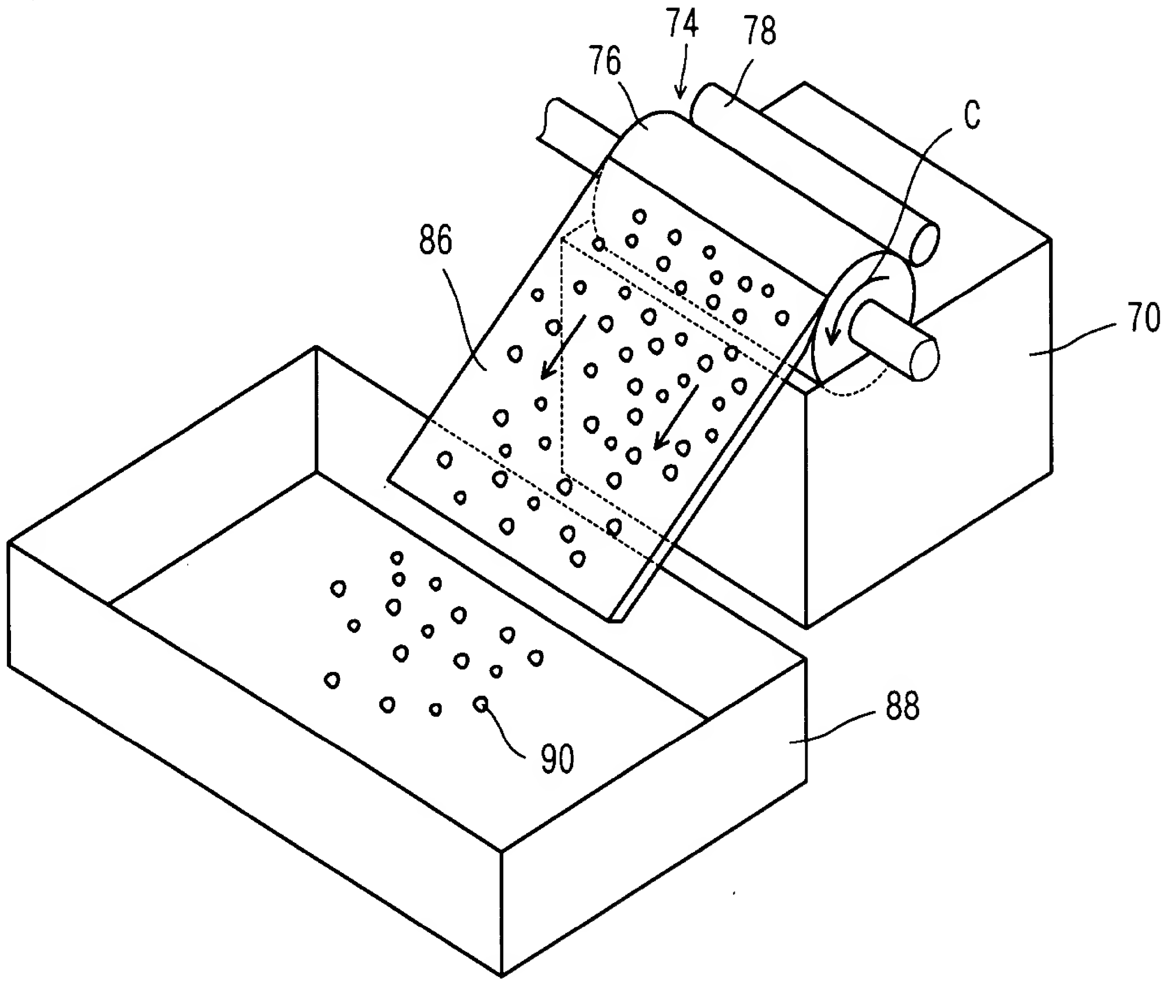

FIG. 6A

Cutting Blade Wear

	Removal by Machining ($\times 10^4 mm^3$)	9	18	27
①	Magnet separator : 0.3 T Cutting Blade Wear (mm^3)	56	115	160
②	Magnet separator : 0.25 T Cutting Blade Wear (mm^3)	55	125	185
③	Magnet separator : 0.2 T Cutting Blade Wear (mm^3)	70	165	235
④	No magnet separator Cutting Blade Wear (mm^3)	90	183	265

FIG. 6B

Relationships between Removal by Machining
and Cutting Blade Wear

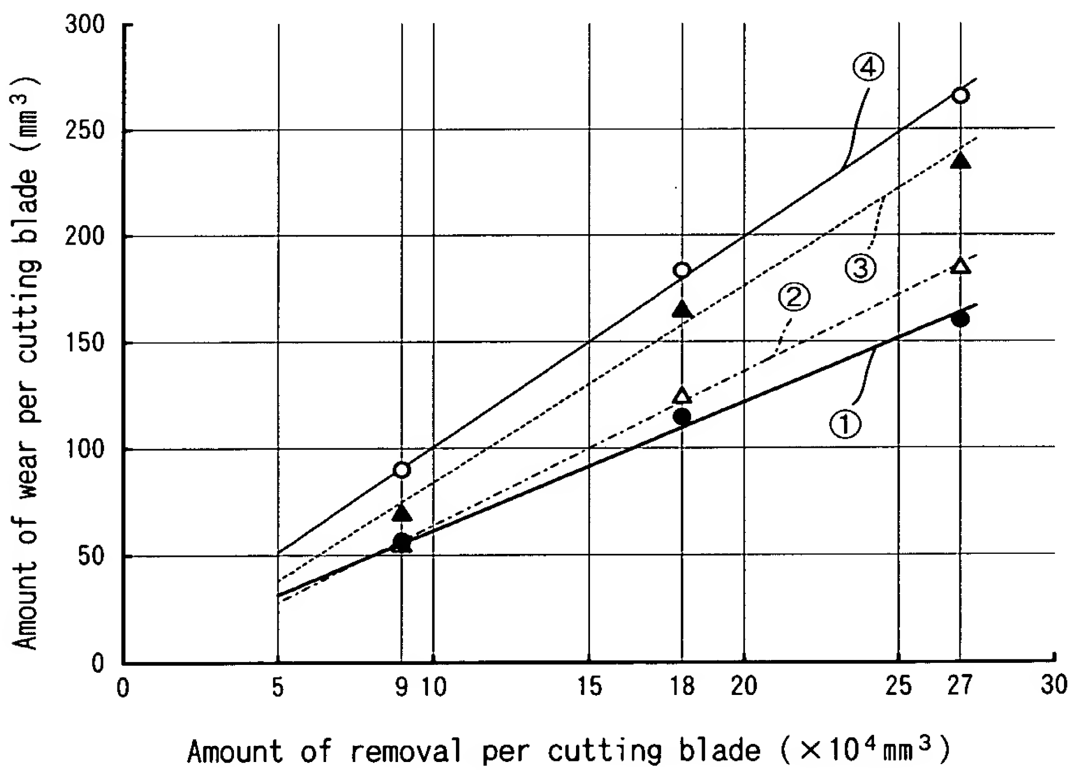

FIG. 7A

Magnet Separator Sludge Removing Ability

(per 500 cc of Grinding fluid)

	Before treatment	⑤ One pass through magnet separator	⑥ Two passes through magnet separator
Volume of sediment (cc)	40	4	1
Sludge containing rate (%)	8.0	0.8	0.2

FIG. 7B

Magnet Separator Sludge Removing Ability

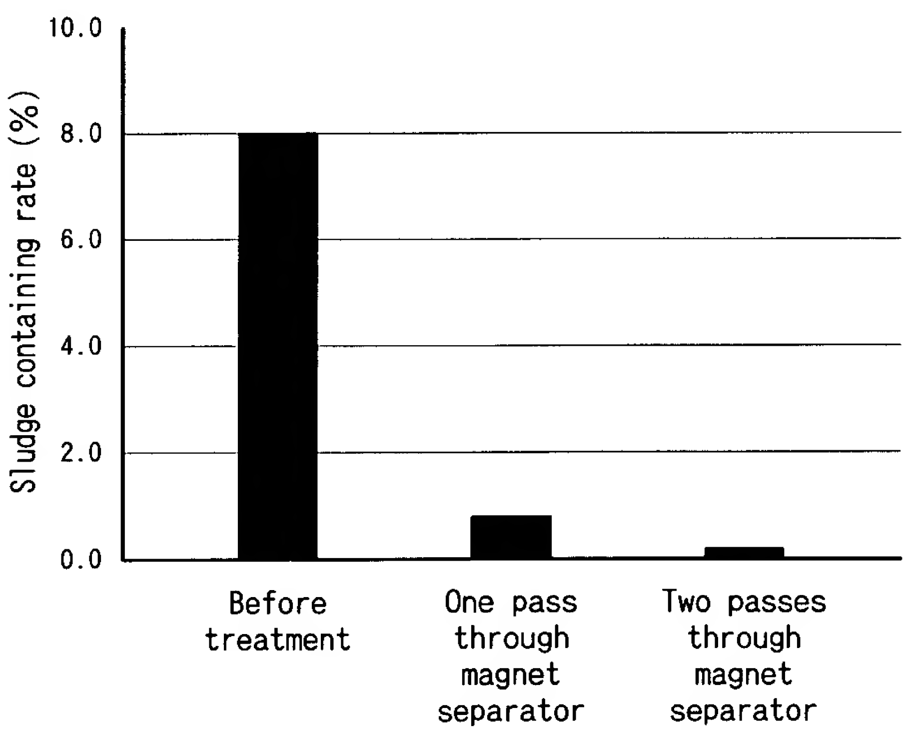

FIG. 8A

Sludge removal rate

	Surface magnetic flux density (T)	0	0.1	0.2	0.25	0.3	0.35
⑦	Magnet separator (without tank) sludge removal rate (%)	0	20	40	80	90	92
⑧	Magnet separator (with tank) sludge removal rate (%)	40	50	60	85	93	94

FIG. 8B

Relationships between Magnet Roller Surface Magnetic Flux Density and Sludge Removal